

# CLAIMS

We claim:

- 5 1. A folding boat comprising:
  - a first and second main panels, wherein each of said first and second main panels having a top, a bottom, a forward end, a rearward end, and two opposing sides,
  - 10 wherein said first main panel rearward end is pivotally hinged to said second main panel forward end, wherein said second main panel is movable to an operational position where said second main panel is substantially coplanar with said first main panel, and
  - 15 wherein said second main panel is movable to a folded position where said second main panel top substantially faces said first main panel top;
  - a first, second, third, and fourth pontoons wherein each of said of said first, second, third, and fourth pontoons having a front end and a rear end,
  - 20 wherein said first and second pontoons are attached to said first main panel bottom where said first and second pontoon are attached substantially in parallel with respect to each other and where said first and second pontoon front ends are substantially aligned towards said forward end of said first main panel and where
  - 25 said first and second pontoon rear ends are substantially aligned towards said first main panel rearward end,
  - wherein said third and fourth pontoons are attached to said second main panel bottom where said third and fourth pontoon are attached substantially in parallel with respect to each other and where said third and fourth pontoon front ends are
  - 30 substantially aligned towards said forward end of said second main panel and where said third and fourth pontoon rear ends are substantially aligned towards said second main panel rearward end;
  - 35 a first, second, third, and fourth drop leaf panels,
  - wherein said first and second drop leaf panels are pivotally hinged to separate sides of said opposite two sides of said first main panel, respectively,
  - 40 wherein said first and second drop leaf panels are movable to said operation position where said first and second drop leaf panels are substantially coplanar to said first main panel and wherein said first and second drop leaf panels are movable to said folded position where said first and second drop leaf panels are
  - 45 substantially perpendicular to said first main panel top,
  - wherein said third and fourth drop leaf panels are pivotally hinged to separate

sides of said opposite two sides of said second main panel, respectively,

wherein said third and fourth drop leaf panels are movable to said operation position where said third and fourth drop leaf panels are substantially coplanar to said second main panel and wherein said third and fourth drop leaf panels are movable to said folded position where said third and fourth drop leaf panels are substantially perpendicular to said second main panel top; and

a first, second, third and fourth fences wherein said first, second, third and fourth fences each having a base, a plurality of legs and a handrail,

wherein each base is pivotally hinged to the bottom ends of the corresponding said plurality of legs and where the top ends of the corresponding said plurality of legs is pivotally hinged to the corresponding said handrail,

wherein said handrails and the corresponding plurality of legs are movable to said operational position where the corresponding said plurality of legs are substantially perpendicular to the corresponding said bases, and

wherein said handrails and the corresponding said plurality of legs are movable to said folded position where the corresponding said plurality of legs relative to the corresponding said base form an acute angle of less than twenty five degrees,

wherein each base corresponding to each of said first, second, third, and fourth fences is individually pivotally hinged to a separate corresponding first, second, third, and fourth drop leaf panel, respectively,

wherein each base is movable to said operational position where its' corresponding said plurality of legs are substantially perpendicular to its' corresponding panel surface, and

wherein each of base is movable to said folded position where its' corresponding plurality of legs are substantially parallel to its' corresponding panel surface.

2. A folding boat comprising:

a first and second main panels, wherein each of said first and second main panels having a top, a bottom, a forward end, a rearward end, and two opposing sides,

wherein said first main panel rearward end is pivotally hinged to said second main panel forward end, wherein said second main panel is movable and lockable to an operational position where said second main panel is substantially coplanar with said first main panel, and

wherein said second main panel is movable to a folded position where said second main panel top substantially faces said first main panel top;

a first, second, third, and fourth pontoons wherein each of said first, second, third, and fourth pontoons having a front end and a rear end,

5 wherein said first and second pontoons are attached to said first main panel bottom where said first and second pontoon are attached substantially in parallel with respect to each other and where said first and second pontoon front ends are substantially aligned towards said forward end of said first main panel and where  
10 said first and second pontoon rear ends are substantially aligned towards said first main panel rearward end,

15 wherein said third and fourth pontoons are attached to said second main panel bottom where said third and fourth pontoon are attached substantially in parallel with respect to each other and where said third and fourth pontoon front ends are substantially aligned towards said forward end of said second main panel and where said third and fourth pontoon rear ends are substantially aligned towards said second main panel rearward end;

20 a first, second, third, and fourth drop leaf panels,

wherein said first and second drop leaf panels are pivotally hinged to separate sides of said opposite two sides of said first main panel, respectively,

25 wherein said first and second drop leaf panels are movable and lockable to said operation position where said first and second drop leaf panels are substantially coplanar to said first main panel and wherein said first and second drop leaf panels are movable to said folded position where said first and second drop leaf panels are substantially perpendicular to said first main panel top,

30 wherein said third and fourth drop leaf panels are pivotally hinged to separate sides of said opposite two sides of said second main panel, respectively,

35 wherein said third and fourth drop leaf panels are movable and lockable to said operation position where said third and fourth drop leaf panels are substantially coplanar to said second main panel and wherein said third and fourth drop leaf panels are movable to said folded position where said third and fourth drop leaf panels are substantially perpendicular to said second main panel top; and

40 a first, second, third and fourth fences wherein said first, second, third and fourth fences each having a base, a plurality of legs and a handrail,

wherein each base is pivotally hinged to the bottom ends of the corresponding said plurality of legs and where the top ends of the corresponding said plurality of legs is pivotally hinged to the corresponding said handrail,

45 wherein said handrails and the corresponding plurality of legs are movable and lockable to said operational position where the corresponding said plurality of

legs are substantially perpendicular to the corresponding said bases, and

wherein said handrails and the corresponding said plurality of legs are movable to said folded position where the corresponding said plurality of legs relative to the corresponding said base form an acute angle of less than twenty five degrees,

wherein each base corresponding to each of said first, second, third, and fourth fences is individually pivotally hinged to a separate corresponding first, second, third, and fourth drop leaf panel, respectively,

wherein each base is movable and lockable to said operational position where its' corresponding said plurality of legs are substantially perpendicular to its' corresponding panel surface, and

wherein each of base is movable to said folded position where its' corresponding plurality of legs are substantially parallel to its' corresponding panel surface.

3. A folding boat comprising:

a first and second main panels, wherein each of said first and second main panels having a top, a bottom, a forward end, a rearward end, and two opposing sides,

wherein said first main panel rearward end is pivotally hinged to said second main panel forward end, wherein said second main panel is movable and lockable to an operational position where said second main panel is substantially coplanar with said first main panel, and

wherein said second main panel is movable and lockable to a folded position where said second main panel top substantially faces said first main panel top;

a first, second, third, and fourth pontoons wherein each of said of said first, second, third, and fourth pontoons having a front end and a rear end,

wherein said first and second pontoons are attached to said first main panel bottom where said first and second pontoon are attached substantially in parallel with respect to each other and where said first and second pontoon front ends are substantially aligned towards said forward end of said first main panel and where said first and second pontoon rear ends are substantially aligned towards said first main panel rearward end,

wherein said third and fourth pontoons are attached to said second main panel bottom where said third and fourth pontoon are attached substantially in parallel with respect to each other and where said third and fourth pontoon front ends are substantially aligned towards said forward end of said second main panel and where said third and fourth pontoon rear ends are substantially aligned towards said second main panel rearward end;

a first, second, third, and fourth drop leaf panels,

wherein said first and second drop leaf panels are pivotally hinged to separate sides of said opposite two sides of said first main panel, respectively,

wherein said first and second drop leaf panels are movable and lockable to said operation position where said first and second drop leaf panels are substantially coplanar to said first main panel and wherein said first and second drop leaf panels are movable and lockable to said folded position where said first and second drop leaf panels are substantially perpendicular to said first main panel top,

wherein said third and fourth drop leaf panels are pivotally hinged to separate sides of said opposite two sides of said second main panel, respectively,

wherein said third and fourth drop leaf panels are movable and lockable to said operation position where said third and fourth drop leaf panels are substantially coplanar to said second main panel and wherein said third and fourth drop leaf panels are movable and lockable to said folded position where said third and fourth drop leaf panels are substantially perpendicular to said second main panel top; and

a first, second, third and fourth fences wherein said first, second, third and fourth fences each having a base, a plurality of legs and a handrail,

wherein each base is pivotally hinged to the bottom ends of the corresponding said plurality of legs and where the top ends of the corresponding said plurality of legs is pivotally hinged to the corresponding said handrail,

wherein said handrails and the corresponding plurality of legs are movable and lockable to said operational position where the corresponding said plurality of legs are substantially perpendicular to the corresponding said bases, and

wherein said handrails and the corresponding said plurality of legs are movable and lockable to said folded position where the corresponding said plurality of legs relative to the corresponding said base form an acute angle of less than twenty five degrees,

wherein each base corresponding to each of said first, second, third, and fourth fences is individually pivotally hinged to a separate corresponding first, second, third, and fourth drop leaf panel, respectively,

wherein each base is movable and lockable to said operational position where its' corresponding said plurality of legs are substantially perpendicular to its' corresponding panel surface, and

wherein each of base is movable and lockable to said folded position where its' corresponding plurality of legs are substantially parallel to its' corresponding panel surface.

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4. The folding boat as described in Claim 1, wherein said pontoons are rigid.

5. The folding boat as described in Claim 1, wherein said pontoons are non-rigid.

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6. The folding boat as described in Claim 5, wherein said pontoons are inflatable.

7. The folding boat as described in Claim 1 wherein said pontoons are detachable.

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8. The folding boat as described in Claim 1 wherein the dimensions of said folding boat where extended to said operational position are approximately 12 feet long, approximately 6 feet wide long and approximately 2 to 4 ½ feet tall,

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9. The folding boat as described in Claim 7, wherein the dimensions of said folding boat where configured in said folded position are approximately 6 feet long, approximately 3 feet wide and approximately 3 ½ to 5 inches tall when said pontoons are detached.

10. The folding boat as described in Claim 1 wherein the total weight of said folding boat is less than 100 pounds.

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11. The folding boat as described in Claim 1 wherein said folding boat is a canoe.

12. The folding boat as described in Claim 1 wherein said first and second main deck panels are substantially identical to each other.

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13. The folding boat as described in Claim 1 wherein said first, second, third, and fourth drop leaf panels are substantially identical to each other.

14. The folding boat as described in 12 wherein said first, second, third, and fourth drop leaf panels are substantially identical to each other.

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15. The folding boat as described in Claim 2, wherein said pontoons are non-rigid.

16. The folding boat as described in Claim 2, wherein said folding boat is a canoe.

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17. The folding boat as described in Claim 2 wherein said first and second main deck panels are substantially identical to each other.

18. The folding boat as described in Claim 3, wherein said pontoons are inflatable.

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19. The folding boat as described in Claim 3 wherein said first, second, third, and fourth drop leaf panels are substantially identical to each other.